ABSTRACT OF THE DISCLOSURE

Embodiments of the present invention provide methods and systems for data movement in data storage systems. For one embodiment, a physical data storage parcel containing a first type of data requiring a first type of processing and a second type of data requiring a second type of processing is created. The first type of data is transferred to a first memory address space via a direct memory access operation and the second type of data is transferred to a second memory address space via the direct memory access operation. For one embodiment, the first type of data and the second type of data are copied to physically distinct data storage mediums. In an alternative embodiment, the first type of data and the second type of data are copied to distinct data storage structures of the same device. Thus, the bulk memory access operations are performed via hardware, thereby reducing performance impact.